



OFFICE OF FINANCIAL MANAGEMENT

15-PASSENGER VAN DRIVERS

BASIC LOSS PREVENTION GUIDE



RISK MANAGEMENT DIVISION

FEBRUARY 2003

**Office of Financial Management
Risk Management Division - Loss Prevention
P.O. Box 41027
Room 301 General Administration Building
Olympia Washington 98504-1027
(360) 902-7312**

Visit our Web site at www.ofm.wa.gov/rmd/loss.htm
General e-mail: ofm.risk.management@ofm.wa.gov

ACKNOWLEDGEMENT

We wish to acknowledge the State of Idaho's Department of Administration, Office of Insurance Management, Risk Management, for information provided in their Self-Study Guide "Operating a Passenger Van."

15-Passenger Van Drivers Basic Loss Prevention Guide

Table of Contents

INTRODUCTION	1
15-PASSENGER VAN REQUIREMENTS	3
SAFE PRACTICES OVERVIEW FOR 15-PASSENGER VAN DRIVERS	5
PREVENTING 15-PASSENGER VAN ROLLOVER	7
PREVENTING “ROAD RUN-OFF”	10
SAFE MANEUVERING TIPS FOR 15-PASSENGER VANS.....	11
GENERAL SAFE DRIVING TIPS	15
MAINTENANCE TIPS	19

APPENDICES

Appendix A – National Highway Traffic Safety Administration Advisories	A-1
Appendix B – NHTSA Informational Flier	B-1
Appendix C – NHTSA Hang Tag	C-1
Appendix D – Training Resources	D-1



15-Passenger Van Drivers

Basic Loss Prevention Guide

INTRODUCTION

The safety of 15-passenger vans drew increased national attention in 1999 after passengers were killed or seriously injured in six separate accidents in various states over a three-month period.

The rising number of 15-passenger van accidents caught the attention of experts at the National Highway Traffic Safety Administration (NHTSA), who began studying the van's propensity to roll over and issued a Research Note on their findings in April 2001.

That same month, a consumer advisory was issued emphasizing the importance of training and education for drivers unfamiliar with the handling characteristics of a vehicle with a higher center of gravity. The importance of seat belt use for the driver and passengers was also stressed.

The advisory was followed by an unprecedented second NHTSA advisory in April 2002, re-emphasizing previous safety strategies and providing an informational hangtag and flier with additional van safe driving tips.

In Washington State, the Risk Management Division of the Office of Financial Management (OFM) provided state agencies with van safety update information and the NHTSA advisories. The Risk Management Division also has designated vehicle accident reduction (in which 15-passenger van safety is a major element) as a focus for prevention activities in 2002-03.

With state agencies eager to increase risk management efforts, OFM convened a 15-passenger van focus group comprised of representatives from state agencies, universities, and community/technical colleges (including agencies with vehicle safety-related expertise). The focus group reviewed the issues and provided recommendations for 15-passenger van loss prevention strategies. These recommendations were developed and adopted into statewide policy under the OFM State Administrative and Accounting Manual (SAAM), and are covered in the next section.

15-PASSENGER VAN REQUIREMENTS



Loss prevention requirements for state agency and college 15-passenger van drivers were developed in 2002 by the Risk Management Division, with assistance from the a statewide agency focus group and the Risk Management Advisory Committee's Loss Prevention Sub-Committee. These requirements appear in the State Administrative and Accounting Manual (SAAM) on the Internet at <http://www.ofm.wa.gov/policy/SAAMintro.htm> and are outlined below.

70.40.32
February 1, 2003

Washington State Loss Prevention Requirements for Operation of 15-Passenger Vans

15-Passenger van driver definition. Refers to employees, student-employees, students, and volunteers operating 15-passenger vans under the direction of a state agency, university, or community or technical college.

70.40.32.a

Driver safety awareness. Agencies, universities, and colleges are required to place and maintain in a conspicuous spot in each 15-passenger van vehicle copies of the National Highway Traffic Safety Administration (NHTSA) "Reducing The Risk of Rollover Crashes in 15-Passenger Vans" - **Hangtag** and "Reducing The Risk of Rollover Crashes in 15-Passenger Vans" - **Flier**.

- New Vehicles: Dealers should provide the above named documents upon delivery, per the state contract.
- Existing Vehicles: Copies of the above documents can be printed from the NHTSA website at www.nhtsa.gov/Hot/15PassVans/index.htm.
- Rental Vehicles: Provide each driver a copy of the above named documents to maintain in the 15-passenger van rental vehicle for the duration of the rental period.

Note: The state rental vehicle contract does not require the rental agency to provide these documents to state employees using rental vehicles.

70.40.32.b

Minimum age/driver experience. All 15-passenger van drivers must be a minimum of 18 years old and have a minimum of two years of driving experience with any type of motor vehicle.

70.40.32.c

Required documents for driver and supervisor signature. Agencies, universities, and colleges are required to have all 15-passenger van drivers sign the *15-Passenger Van Driver Valid License to Drive and Driving Experience Statement* and the *15-Passenger Van Driver Safe Driving Practices Acknowledgement Statement* at the initial 15-passenger van driving assignment.

Managers/supervisors also sign the *15-Passenger Van Driver Valid License to Drive and Driving Experience Statement* under the manager/supervisor responsibilities checklist section.

Agencies are required to maintain the above documents in appropriate agency files.

Note: The Risk Management Division recommends the two documents be printed on one page, back-to-back.

70.40.32.d

Required safety education or training.

- Agencies, universities, and colleges are required to provide employees, student-employees, students, and volunteers with 15-passenger van safety education or training *prior to their initial operation* of an agency-owned, motor pool, or commercially rented 15-passenger van.
- Training is to be documented by the agency, university, or college, and records maintained in appropriate agency files.
- Renewal training must be provided every two years. Renewal training should consist of a review of initial training information with updates as appropriate.
- Renewal training must be documented and maintained in appropriate agency files.

Safety education or training provided must minimally include (1) review of all National Highway Traffic Safety Administration (NHTSA) advisories, (2) review of the NHTSA Hangtag and Flier for 15-passenger vans, and the Risk Management Division's "15-Passenger Van Drivers Basic Loss Prevention Guide," available on the Internet at the Risk Management Division's section of the Office of Financial Management's web site at: <http://www.ofm.wa.gov/rmd/loss/passenger.htm>

Note: Due to the varying needs of agencies, universities, and community and technical colleges, the minimum requirement can be augmented with additional training information or training courses as desired. Length of training, training mode, type of training materials, or audio-visuals used is at the agency's discretion.

70.40.32.e

15-Passenger van seat reduction recommendation. Agencies are encouraged, when feasible, to reduce the number of passengers in 15-passenger vans by at least five to reduce the weight in the back of the van. Agencies may remove the seats and/or require the driver to ensure passengers sit in the forward seats.

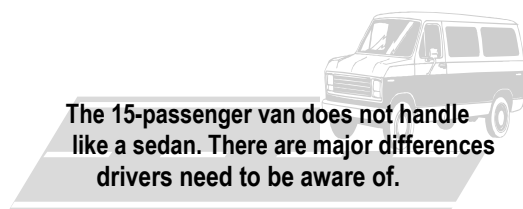
SAFE PRACTICES OVERVIEW FOR 15-PASSENGER VAN DRIVERS

Seatbelts save lives.
Drivers and passengers must
“buckle-up.”



- ❖ Be aware of how the van's height and width impact its stability.
- ❖ Load and unload passengers in a safe place. Check doors to ensure they are closed.
- ❖ Use seatbelts. Washington law requires it.
- ❖ Check mirrors when merging. Use a spotter to ensure adequate clearances.
- ❖ Allow longer stopping and following distances.
- ❖ Plan turns in advance to allow adequate space.
- ❖ Keep alert in order to respond quickly and safely to unexpected situations.
- ❖ Use extreme caution when driving in adverse weather conditions.
- ❖ Avoid situations that cause the wheels to leave the roadway.
- ❖ Use mirrors or spotters when backing up. When possible avoid backing up when parking.
- ❖ Park and lock the van before leaving.

PREVENTING 15-PASSENGER VAN ROLLOVER



Driving a van is different from driving a car. A van's increased height, length, and weight require the driver to be aware of these different handling characteristics when performing even routine vehicle maneuvers.

In April 2001, the National Highway Traffic Safety Administration released a research note entitled, "The Rollover Propensity of 15-Passenger Vans."* They reviewed all single vehicle crashes involving 15-passenger vans and found that the propensity for a van to rollover increased with the increase in occupancy level.

NUMBER OF CRASHES, ROLLOVER AND ROLLOVER RATIOS BY OCCUPANCY LEVEL OF 15-PASSENGER VANS IN SINGLE VEHICLE CRASHES

Occupancy Level	All Single Vehicle Crashes	All Rollovers	Rollover Ratio	Combined Ratios
Less than 5	1,815	224	12.3%	12.7%
5-9	77	16	20.8%	
10-15	55	16	29.1%	35.4%
More than 15	10	7	70.0%	

Drivers need to become familiar with the unique features of the 15-passenger van such as height and width restrictions, as they impact handling and safe driving practices.

Compared to most cars, 15-passenger vans are:

Higher than most cars

Longer than most cars

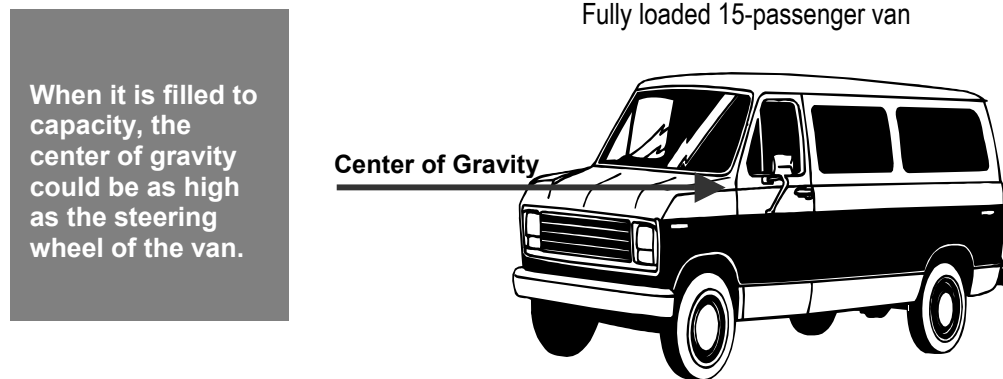
Wider than some cars

*This research note is available at <http://www.nrd.nhtsa.dot.sav/pdf.30/ncsa/rnotes/2001115vanrollnote.pdg>

The *center of gravity* of a 15-passenger van is different from a sedan. Most sedan vehicles have a low center of gravity, usually located at the bumper level of the vehicle. This keeps the sedan from leaning too far in one direction or another during normal or emergency situations, and gives it road stability. (Note how racing cars designed for high speeds are built low to the ground.)

The passenger van's center of gravity is inherently higher due to its size and shape. As the van is loaded with passengers and/or equipment, the center of gravity *continues to rise*. **When it is filled to capacity, the center of gravity could be as high as the steering wheel.**

This raising of the center of gravity seriously compromises the stability of the van, **especially during quick, unplanned maneuvers, such as sudden turns, striking a curb at a high rate of speed, or running off the pavement and trying to bring the wheels back to the road surface or lane too quickly.**

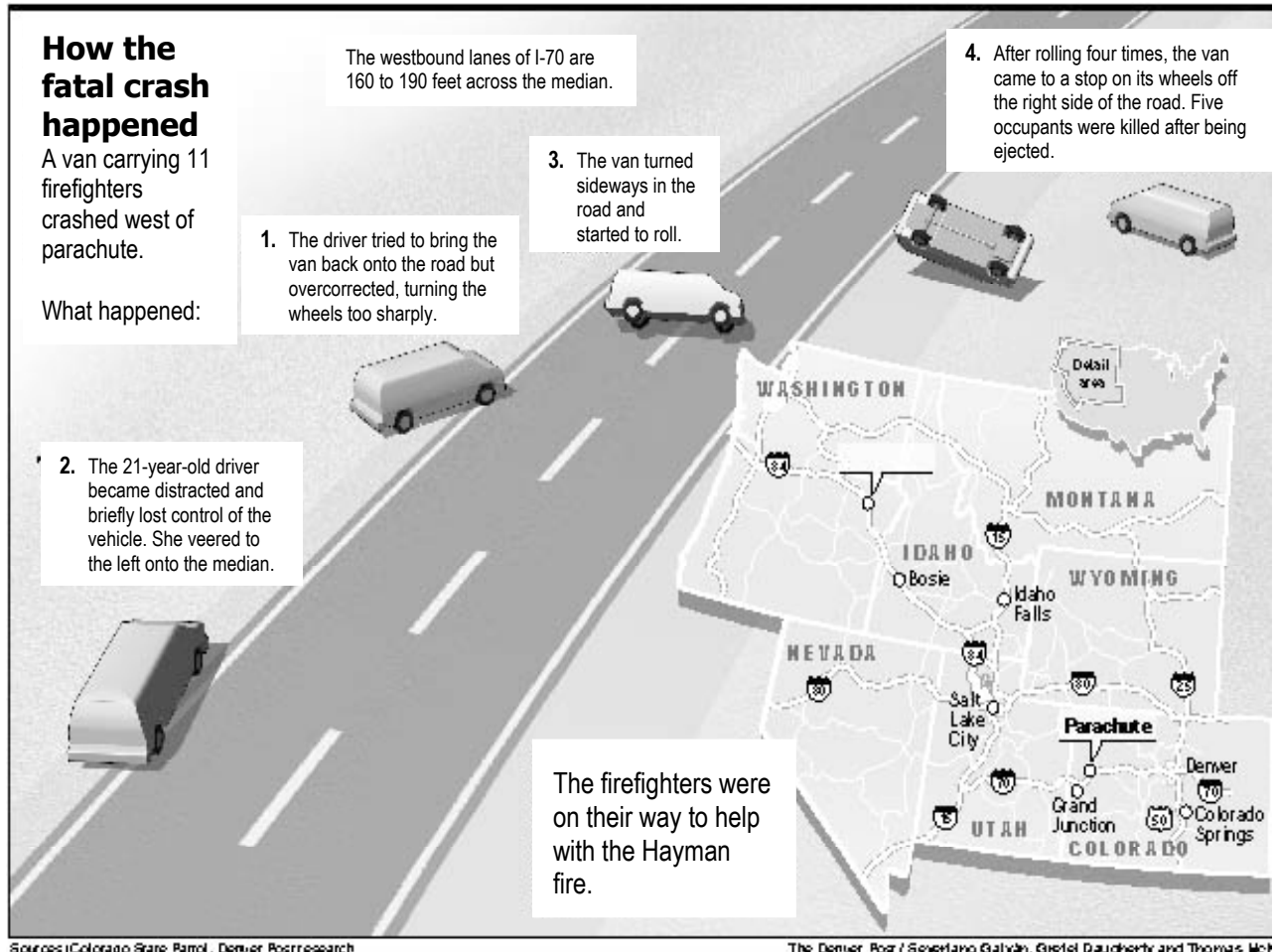


Driving too fast through curves can also cause a significant shift of weight causing the van to lean in the opposite direction of the curve. As the weight of the van and its passengers shift in response to the curve, the tires will come off the roadway and the van will, literally, flip onto its side. Once the tires of the van have come off the roadway, there is little a driver can do to mitigate the circumstances from that point. A vehicle rollover will likely result and, depending on a variety of factors, could develop into a serious vehicle accident.

The illustration below details the sequence of events that resulted from an overcorrecting “panic maneuver” by a 15-passenger van driver attempting to bring a van back to the roadway after it drifted off. Denver Post staff writer Greg Griffin included this illustration in a June 23, 2002 story he wrote about a 15-passenger van accident that occurred near Parachute (western Colorado) the day before.

While traveling east of Parachute on Interstate 70, a panicked 21 year old driver turned the wheels too sharply when trying to return to the roadway, rolling the 15-passenger van. The van carried eleven firefighter passengers and some gear, and was enroute to a nearby forest fire. The rollover accident resulted in the deaths of five Oregon firefighters.

The driver, who survived the accident, was a contractor for the U.S. Forest Service. Contractors are required to have a standard drivers license, but it was not known if other training was required.



Staff writer Mike Soraghan contributed to this report.

The NHTSA found that in 90 percent of rollover vehicle crashes, the driver lost control of the vehicle and ran off the road. Drivers should be aware of three major situations that can lead to 15-passenger van rollover. Van drivers should avoid these situations:

The driver is fatigued or driving too fast for conditions. Either a tired driver that dozes off or one traveling too fast for conditions can lose control of the vehicle. A slide sideways off the road and into a grassy or dirt median generally causes the van tires to dig into the dirt and overturn.

The driver “overcorrects” the steering as a panic reaction to an emergency or to a wheel dropping off the pavement. Drivers are especially susceptible at freeway speeds of losing control, resulting in the van sliding sideways and rolling over.

- **Attentive and Non-Distracted Driving** – Close attention is paid to driving by avoiding or minimizing distractions. Continual scanning of road conditions ahead is practiced so that drivers can respond in a controlled manner to changing conditions.
- **Appropriate Travel Speed for the Conditions** – Speed is kept to the posted limit or under and is continually adjusted based on the type of driving conditions encountered or required to safely control and maneuver the vehicle.
- **Impairment-Free Driving to Avoid Drowsiness** – Drivers avoid drowsy or impaired reactions by driving well rested and avoiding use of alcohol and drugs (including prescription drugs that cause drowsiness-related symptoms).

- Slow down! But avoid severe brake application, easing the vehicle back onto the pavement only after reducing speed. Avoid turning the steering wheel too sharply while returning to the road surface.
- It may be safer to stay on the apron or shoulder of the road and slow down gradually before returning to the pavement. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.
- Often, it may be less risky to strike small objects (such as highway reflectors) with minor damage to your vehicle rather than attempt a sudden return to the pavement, which could cause the vehicle to slide sideways, or it is safer to stay on the apron or shoulder of the road and slow down gradually to gain control and avoid rollover.

SAFE MANEUVERING TIPS FOR 15-PASSENGER VANS



STOPPING AND FOLLOWING DISTANCE TIPS

The stopping distance for 15-passenger vans will always be greater due to the increased weight of the van (and especially with a full load of passengers and/or equipment).

15-PASSENGER VANS VS. SEDANS STOPPING DISTANCE

- ✓ The 15-passenger van weighs more and takes longer to stop than a car, especially when loaded with passengers or equipment.
- ✓ A three to four second following distance between the van and the vehicle in front of the van is a recommended minimum.
- ✓ Greater stopping distances must be used when traveling in adverse weather conditions or on poor roads.

LANE CHANGING OR MERGING TIPS

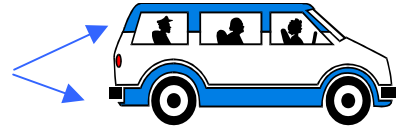
Making a lane change or merging into traffic can be challenging when driving any vehicle, but even more so with the 15-passenger van. The following are general safe practices for changing lanes or merging into traffic with a 15-passenger van.

- Create more space around the 15-passenger van by reducing or increasing van speed.
- Signal intentions by engaging blinkers early.
- Use the merge lane as intended and designed.
- Use the mirrors as needed.
- Yield the right-of-way when necessary.
- Ask for passenger assistance if needed to verify maneuvering for merging.

TURNING POINTERS

The turning radius on a van is greater than that of a regular vehicle due to its length. As a result it takes more room to turn corners in a van. Turns can be practiced before driving on the road to help the 15-passenger van driver become familiar with the dynamics of this maneuver. Drivers should consider the following safety practices when turning:

Overall, reduce the speed of the van.



← When turning left:

- ⇒ Start the turn farther forward into the intersection. Due to the length of the van, the van will have a tendency to take the turn in a diagonal direction.
- ⇒ Plan plenty of room in the intersection to avoid striking the vehicle waiting to enter the intersection from the left.

When turning right: →

- ⇒ Make a square turn by moving the vehicle just far enough to the left so when the right turn is made, the rear of the vehicle won't run over the curb.
- ⇒ Signal turning intentions farther in advance than normal to alert other drivers of the van's intentions or direction.
- ⇒ Complete a check to ensure there is no on-coming traffic. On a 4-lane roadway, check the mirrors before merging left to ensure traffic is clear when preparing for the right turn.
- ⇒ Start the right turn as far into the intersection as possible to avoid interfering with on-coming traffic to the right.
- ⇒ Do a "last glance at the right-side mirror" to avoid a situation where a pedestrian, bike or another automobile may have "squeezed" in between the van and the curb as more space was made for a wider turning radius.

BACKING TIPS

Backing a van is also different from a sedan, and often requires practice. Drivers should ask passengers for assistance during the backing maneuver when necessary to prevent injuries or damage to the agency van or other vehicles.

If the route is planned in advance, considerations can be given to parking the van in a spot that allows it to be pulled forward to avoid backing. If backing the vehicle cannot be avoided, the following safe backing tips should be considered:

- Back towards the driver's side.
- Use spotters if needed. Spotters should be sure they are positioned so the driver can see and hear them. Drivers must ensure they maintain visual contact with the spotters during the entire backing process.
- Use the mirrors.
- When the situation dictates or there is a question about obstructions, (particularly if it involves pedestrians, workers, etc.), the driver should get out of the van and briefly survey the area where the van will be backed into.

PASSENGER LOADING AND UNLOADING TIPS

Extra caution and consideration should be exercised by drivers when picking up or dropping off passengers. Drivers should ensure passengers safely exit the vehicle. The following are tips for increasing safety during passenger pick-up or drop-off.

- Position the van out of traffic or the traveled lane.
- Turn on hazard flashers.
- Park the van on a level surface and apply the emergency brake.
- Never leave the driver's seat when the engine is running.
- Assist riders to enter or exit safely if assistance is requested or required.
- When loading passengers, ensure that the number of passengers do not exceed the number of seats with seat belts.
- When unloading passengers, remind exiting riders to walk behind the van and to be cautious of traffic.
- Check to make sure the passenger door is securely closed.
- Before pulling forward, make sure all passengers have cleared the forward path of the van.

PARKING AND SECURING TIPS

The following are tips for safely parking the 15-passenger van:

- The selected parking place should have plenty of room and, when possible, should enable the driver to pull forward rather than having to back out.
- On a hill, the driver should turn the wheels so the van will roll against the curb.
- The parking brake should always be set.
- The transmission gear should be placed in “park.”
- All electrical accessories should be turned off.
- All windows should be closed.

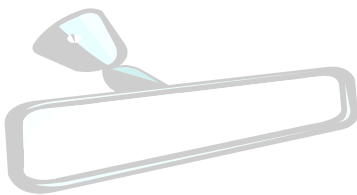
Before leaving the van unattended, the 15-passenger van driver should ensure that:

- The engine is shut off and the keys removed.
- All doors are locked.

MIRROR USE TIPS

In preparation for driving a 15-passenger van, drivers should check the position of the mirrors to ensure they are adjusted properly for maximum vision. If needed, the driver could ask one of the passengers to assist as mirror adjustments are made. It is important to ensure there is unobstructed visibility in the area alongside of the van to minimize creating a blind spot.

Properly adjusted mirrors enables the driver to apply the basic defensive driving practice of scanning mirrors every 5 to 10 seconds, looking at the roadway in front and behind while driving. This enables the driver to spot traffic hazards or other conditions and respond to them in a controlled, rather than potentially panicked manner.



USING MIRRORS ALLOWS THE DRIVER TO BE ALERT TO:

- Road hazards
- Traffic
- Pedestrians or bicycles
- Changing weather conditions

GENERAL SAFE DRIVING TIPS

Driving at posted or lower speeds affords more control for adapting to changing driving conditions.



SEATBELTS

Washington state laws require seatbelt use. Fines for non-use can be issued to the state driver (and would be the responsibility of the driver to pay). The importance of seat belt use for driver and passenger safety was stressed in both NHTSA advisories. The driver should ensure all passengers buckle their seatbelts. The best time to check to see if all passengers are buckled in their seatbelts is before the van is started.

SEATBELT CHECK

- ☑ Verbal reminder for passengers “to buckle up”.
- ☑ Quick check to see that all passengers have their seatbelts fastened before moving the van.



YIELD TO SAFETY

Driving defensively pays off. It’s worth the courtesy and effort of giving the other driver the “right-of-way.” Courteous driving practices minimize citizen complaints, and may also help deter potential road rage incidents.

TIPS FOR
ADVERSE
WEATHER
OR
CHANGING
TRAFFIC
CONDITIONS

If forecasts predict snow, ice or other adverse conditions for a planned trip, agencies may consider the option of canceling or postponing the trip. This is an easy way to avoid risk.

Reducing speed is a simple but important safety practice when driving in rain, snow, ice, fog, or other severe weather condition. The posted speed limit should be the driving speed *only* when the most excellent road conditions are present. It is always advisable to reduce speed if unsure about whether a specific condition calls for lower speeds.

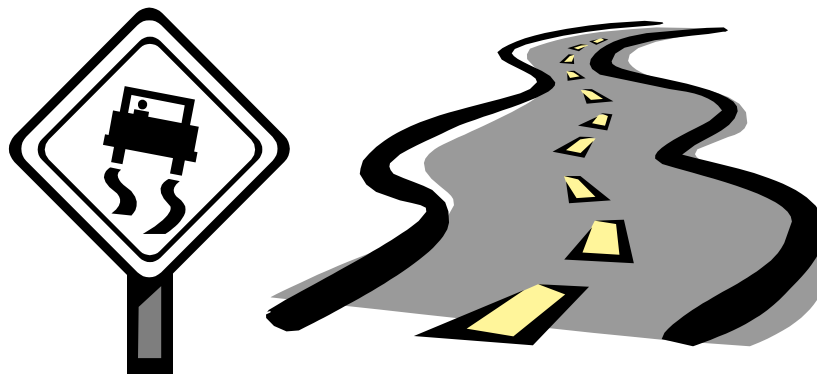


Driving in adverse conditions requires close attention to what's happening all around. In addition to the car directly ahead, drivers need to be aware of what is happening with the next several cars ahead. Other drivers may be reacting to a situation that is not yet in the van driver's view. The practice of continually scanning the traffic as far ahead as possible helps in determining if there is a situation that requires reaction or an adjustment to safely maintain control in maneuvering the 15-passenger van.

WIND
AND
CURVES

The van's boxy non-aerodynamic shape, combined with the already high center of gravity, can make driving difficult in windy situations. This is especially difficult if a blast of wind hits the side of the van. Another wind source to be cautious of is the wind vacuum that is created by large trucks and buses. The van may be "rocked" along side these vehicles, with the wind coming from any direction. These conditions require the driver to keep both hands on the steering wheel and careful watch of the road ahead. Depending on overall conditions, it may be necessary to lower the speed to keep the van in its lane.

Extra caution is required when driving on curves. Posted or lower than posted speed limits should be observed on curves.



**PREVENTING
IMPAIRMENT
– DRIVING
ALERT TIPS**



Impaired driving, whether caused by driving under the influence of alcohol or drugs, or falling asleep at the wheel due to lack of rest may result in a vehicle gradually drifting out of its lane onto the shoulder or into the median of the roadway. This all too often follows with the driver panicking and overcorrecting to bring the vehicle back under control. As covered earlier in this guide, over-steering or other jerky, quick maneuvers contribute significantly to the potential of 15-passenger van rollover.

A habit of driving alert and without impairment contributes significantly to the safety of the 15-passenger van driver, his or her passengers, and the driving public overall.

CONDITION	POTENTIAL RESULT	TIPS FOR PREVENTING IMPAIRMENT
Lack of sleep	Inattentive driving Falling asleep at the wheel Delayed responses	Get an adequate amount of rest based on individual's need.
Alcohol or drug use	Inattentive driving Faulty decision making Delayed responses	No alcohol use. No drug use (including prescription drugs that warn about drowsiness or related effects, i.e. do not operate machinery).
Fatigue	Inattentive driving Delayed responses Falling asleep at the wheel	Use of authorized and trained relief drivers. Use of driving time limitation policies, i.e. drivers drive a prescribed shift of hours. Use of driving hour limitation policies, i.e. no driving between 12 midnight and 5:00 a.m. Use of scheduled rest breaks throughout the trip (which are taken).

**MINIMIZING
DISTRACTIONS –
DRIVING
FOCUSED
TIPS**

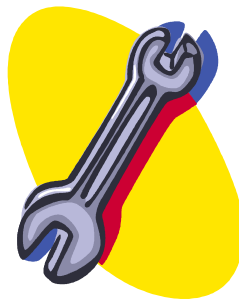
Distractions may also result in the driver inadvertently allowing the 15-passenger van to drift off the roadway or into another lane, leading to the panicked, over-steering scenario mentioned previously. Minimizing activities that may have a potential for leading to driver distraction will help the driver focus on the important task of driving the 15-passenger van.

POTENTIAL DISTRACTION	TIPS FOR MINIMIZING DISTRACTIONS
Cell Phone/Electronic Devices Use 	<ul style="list-style-type: none"> ▪ Limit cell phone use primarily to emergency calls or preferably, wait until the vehicle is safely stopped. ▪ Ask passengers to assist with necessary calls when possible. ▪ Operate other electronic equipment only when the vehicle is safely stopped.
Food	<ul style="list-style-type: none"> ▪ If possible, consume food and drinks while the vehicle is stopped or during rest or other planned stops, i.e. re-fueling, checking directions, etc.
Unfamiliar or Unadjusted Equipment Settings	<ul style="list-style-type: none"> ▪ Set the radio before beginning a trip, so traffic information is readily available to make travel adjustments if and when needed. ▪ If unfamiliar with the vehicle, locate and know how to operate the key vehicle devices (lights, windshield wipers/washer, heater/cooling buttons, emergency brake, emergency flashers, etc.) prior to driving the van.
Maps or Directions 	<ul style="list-style-type: none"> ▪ Study maps and directions prior to the trip. ▪ If additional reference is needed, pull off to a safe location to refer to directions or maps. ▪ Ask a passenger for assistance.

MAINTENANCE TIPS

Vehicle maintenance contributes to the safe operation of any vehicle. The vehicle owners' manual provides information about maintenance requirements for the vehicle. Mechanical problems should be reported to the appropriate manager or supervisor.

A primary contributor to *any* vehicle rollover is loss of control caused by tire failure. Proper tire pressure is essential in maintaining the integrity of the tire. Tires should be checked visually before every trip, and at least monthly with an accurate tire gage when the tire is cold. The proper air pressure level is found in the owner's manual or on the tire pressure sticker or vehicle data plate located on the doorjamb or glove box door. It should be noted that the maximum tire pressure found on the tire sidewall is not the proper pressure for that vehicle. Questions about tire pressure should be discussed with the appropriate manager or supervisor.



NOTES



Advisories - National Highway Traffic Safety Administration (NHTSA)

United States Department of Transportation (www.nhtsa.dot.gov)



News :

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

FOR IMMEDIATE RELEASE

April 9, 2001

Media Calls: Rae Tyson (202) 366-9550

Consumer Calls: Auto Safety Hotline 1-888-327-4236

CONSUMER ADVISORY

The National Highway Traffic Safety Administration (NHTSA) is issuing a cautionary warning to users of 15-passenger vans because of an increased rollover risk under certain conditions.

The results of a recent analysis by NHTSA revealed that 15-passenger vans have a rollover risk that is similar to other light trucks and vans when carrying a few passengers. However, the risk of rollover increases dramatically as the number of occupants increases from fewer than five occupants to over ten passengers.

In fact, 15-passenger vans (with 10 or more occupants) had a rollover rate in single vehicle crashes that is nearly three times the rate of those that were lightly loaded.

NHTSA's analysis revealed that loading the 15-passenger van causes the center of gravity to shift rearward and upward increasing the likelihood of rollover. The shift in the center of gravity will also increase the potential for loss of control in panic maneuvers.

Because of these risks, it is important that these vans be operated by experienced drivers. A person transporting 16 or more people for commercial purposes is required to have a Commercial Driver's License, which requires certain specialized knowledge and driving skills. Although the drivers of these vehicles are not required to possess a Commercial Driver's License, they should still understand and be familiar with the handling characteristics of their vans, especially when the van is fully loaded.

NHTSA's analysis reinforces the value of seat belts. Eighty percent of those nationwide who died last year in single vehicle rollovers last year were not buckled up. Wearing seat belts dramatically increases the chances of survival during a rollover crash. NHTSA urges that institutions using 15-passenger vans require seat belt use at all times.

NHTSA is making this information available because of these findings and because of several highly publicized rollover accidents involving 15-passenger vans loaded with college students (often driven by a fellow student rather than a professional driver).

While federal law prohibits the sale of 15-passenger vans for the school-related transport of high school age and younger students, no such prohibition exists for vehicles to transport college students or other passengers. A copy of the NHTSA analysis of the rollover characteristics of 15-passenger vans can be found at: <http://www-nrd.nhtsa.dot.gov/departments/nrd-12/23rev.html>.



News :

Office of the Assistant Secretary for Public Affairs
Washington, D.C. 20590

NHTSA 27-02
Monday, April 15, 2002

Contact: Rae Tyson
Telephone: (202) 366-9550

NHTSA Repeats Rollover Warning To Users of 15-Passenger Vans

The nation's top motor vehicle safety executive, Jeffrey Runge, M.D., head of the U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA), today reissued a cautionary warning to users of 15-passenger vans because of an increased rollover risk under certain conditions. A similar warning was issued in 2001.

The safety agency also unveiled a consumer flyer for users of 15-passenger vans.

NHTSA research has shown that 15-passenger vans have a rollover risk that increases dramatically as the number of occupants increases from fewer than five to more than ten. In fact, 15-passenger vans (with 10 or more occupants) had a rollover rate in single vehicle crashes that is nearly three times the rate of those that were lightly loaded.

"Because of these risks, it is vital that users of 15-passenger vans be aware of some safety precautions that will significantly reduce the risk," said Dr. Runge.

- Among the recommendations are the following:
- It is important that 15-passenger vans be operated by trained, experienced drivers.
- Insist that all occupants wear seat belts at all times. Eighty percent of those who died in 15-passenger van rollovers nationwide in the year 2000 were not buckled up. Wearing seat belts dramatically increases the chances of survival during a rollover crash. In fatal, single-vehicle rollovers involving 15-passenger vans over the past decade, 92 percent of belted occupants survived.

NHTSA is reissuing this advisory to specifically alert summertime users of 15-passenger vans. The agency also has prepared a flyer on 15-passenger van safety that is available on the web at <http://www.nhtsa.dot.gov/Hot/15PassVans/index.htm>. The agency also is considering the potential benefits of an additional warning label about rollover and seat belt use that would be visible to the driver and passengers of 15-passenger vans, respectively.

While federal law prohibits the sale of 15-passenger vans for the school-related transport of high school age and younger students, no such prohibition exists for vehicles to transport college students or other passengers. A copy of the NHTSA analysis of the rollover characteristics of 15-passenger vans can be found at: <http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html> under "Research Notes". The new consumer advisory also is available at: www.nhtsa.dot.gov/nhtsa/announce/.

NHTSA Informational Flier

REDUCING THE RISK OF ROLLOVER CRASHES IN 15-PASSENGER VANS

Fifteen-passenger vans typically have seating positions for a driver and 14 passengers. They are widely used by community organizations to take members on short trips and outings. Colleges use them to drive sports teams to intercollegiate games and vanpools use them for commuters.

What increases the risk of rollover crashes?

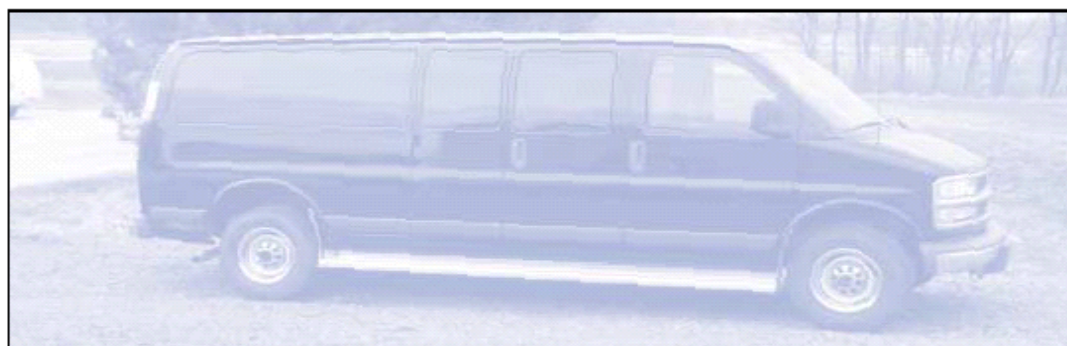
Recent research conducted by the National Highway Traffic Safety Administration (NHTSA) has found that the risk of a rollover crash is greatly increased when 10 or more people ride in a 15-passenger van. This increased risk occurs because the passenger weight raises the vehicle's center of gravity and causes it to shift rearward. As a result, the van has less resistance to rollover and handles differently from other commonly driven passenger vehicles, making it more difficult to control in an emergency situation. Placing any load on the roof also raises the center of gravity and increases the likelihood of a rollover.

What situations can cause a rollover?

A rollover crash is a complex event, heavily influenced by driver and road characteristics as well as the design of the vehicle. In studies of single-vehicle crashes, NHTSA has found that more than 90 percent of rollovers occur after a driver has lost control of

the vehicle and has run off the road. Three major situations can lead to a rollover in a 15-passenger van.

- The van goes off a rural road. If this occurs, the van is likely to overturn when it strikes a ditch or embankment or when it is tripped by an object or runs onto soft soil.
- The driver is fatigued or driving too fast for conditions. A tired driver can doze off and lose control. The driver can also lose control when traveling at a high speed causing the van to slide sideways off the road. The grassy or dirt medians that line highways can often cause the van to overturn when the tires dig into the dirt.
- The driver overcorrects the steering as a panic reaction to an emergency or to a wheel dropping off the pavement. Especially at freeway speeds, this situation can cause the driver to lose control, resulting in the van sliding sideways and rolling over.



What can organizations do to protect their passengers?

Over the past decade, 80 percent of people killed in rollover crashes in 15-passenger vans were unbelted. Passengers can dramatically reduce their risk of being killed or seriously injured in a rollover crash by simply using their seat belts. Organizations that own 15-passenger vans should have a written seat belt use policy. Drivers should be responsible for enforcing the policy.

Seat belt use is especially critical because large numbers of people die in rollover crashes when they are partially or completely thrown from the vehicle. NHTSA estimates that people who wear their seat belts are about 75 percent less likely to be killed in a rollover crash than people who don't.

Does an experienced driver make a difference?

Significant differences in the design and handling characteristics of a 15-passenger van make it drive differently from other passenger vehicles. Therefore, an organization that owns a 15-passenger van should select one or two experienced drivers to drive the van on a regular basis. These drivers will gain valuable experience handling the van. This experience will help make each trip a safe one.

How can rollover crashes be prevented?

Because most rollover crashes don't involve other vehicles, they are often preventable. Here are some tips for drivers to minimize the risk of a rollover crash and serious injury:

- Avoid conditions that lead to a loss of control. Never drive while under the influence of alcohol or other drugs. Make sure you are well rested and attentive, and always slow down if the roads are wet or icy.

- Drive cautiously on rural roads. Be particularly cautious on *curved* rural roads and maintain a safe speed to avoid running off the road.
- Know what to do if your wheels drop off the roadway. If your wheels drop off the roadway, or pavement, *gradually* reduce speed and steer back onto the roadway when it is safe to do so.
- Properly maintain your tires. Make sure your tires are properly inflated and the tread is not worn down. Worn tires can cause your van to slide sideways on wet or slippery pavement. Improper inflation can cause handling problems and can lead to catastrophic tire failures, such as blowouts. Therefore, check tire pressure and treadwear once a month.

What are other considerations for safe driving?

When a 15-passenger van is not full, passengers should sit in seats that are in front of the rear axle.

More than 15 people should never be allowed to ride in a 15-passenger van.

Because a 15-passenger van is substantially longer and wider than a car, it:

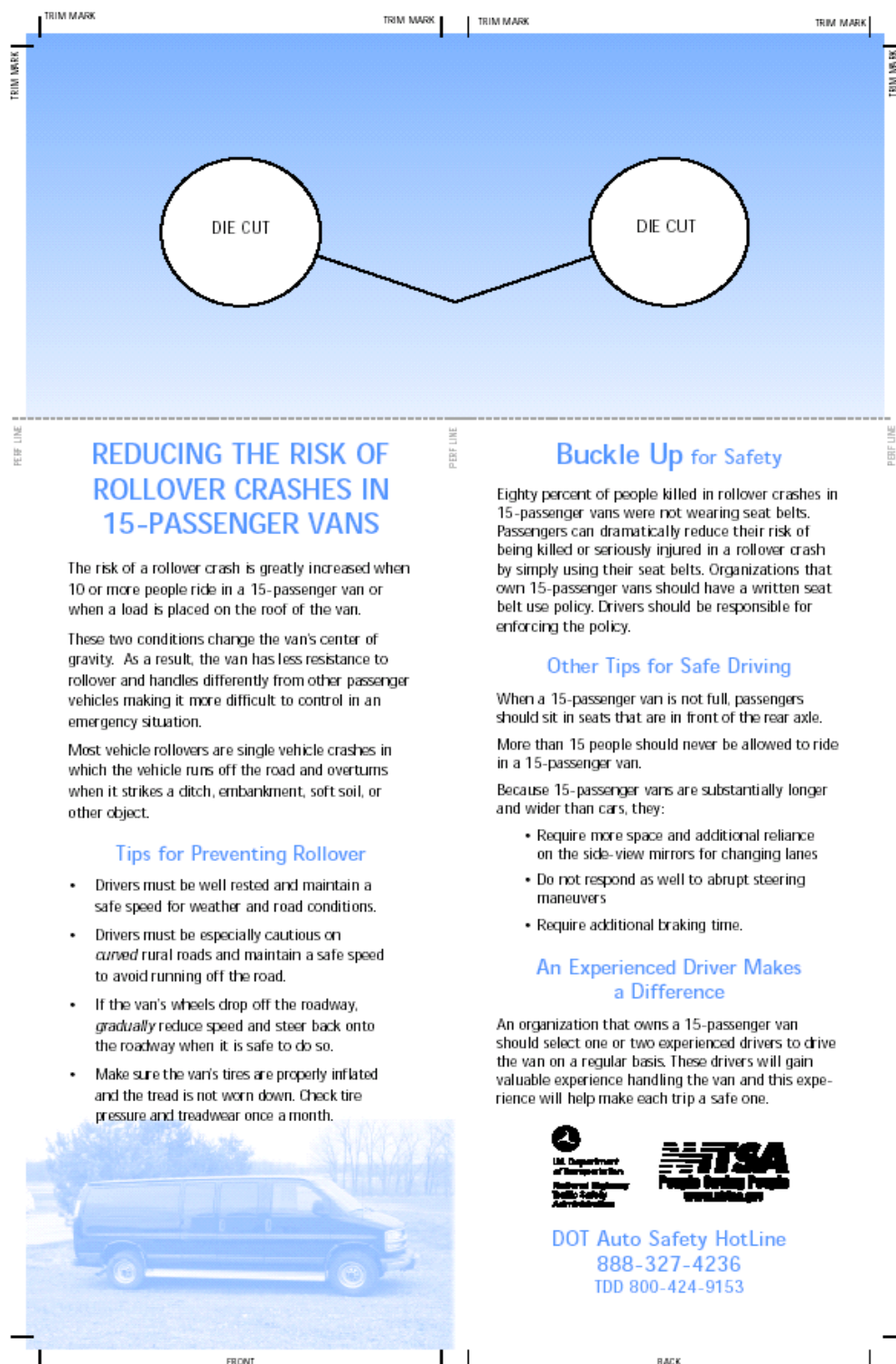
- Requires more space and additional reliance on the side-view mirrors for changing lanes
- Does not respond as well to abrupt steering maneuvers
- Requires additional braking time.



DOT Auto Safety HotLine
888-327-4236
TDD 800-424-9153



NHTSA Hang Tag



Training Resources

Commercial Driving Safety Training Resources

The following is sampling of commercial training product sources addressing driving safety – some specifically related to 15-passenger vans. This list does not constitute an endorsement by the Risk Management Division of these products. It is provided merely to acquaint agencies with available resources.

RESOURCE TYPE	COMMERCIAL TRAINING PRODUCTS
15-Passenger Van Driver Training Course (Narrated and Un-narrated Versions)	15-PASSENGER VAN DRIVER IMPROVEMENT COURSE WorkSafe Institute of Washington (Central Washington University, Highline Community College, and Skagit Valley College) - Course and package of materials <u>Available From:</u> WorkSafe Institute of Washington (Central Washington University) <u>Web Address:</u> http://www.wsiwa.com/
15-Passenger Van Training Course *(This source can also be borrowed for free, see state agency listing below).	COACHING THE VAN DRIVER II* <i>(Produced in cooperation with the National Safety Council)</i> COACHING THE VAN DRIVER II (SELF-INSTRUCTION) Video tape, instructor's guide and student workbooks <u>Available From:</u> Top Driver – FLI – The Coaching Series <u>Web Address:</u> http://www.flilearningsystems.com/
15-Passenger Van Training Course	LARGE PASSENGER VAN TRAINING Interactive CD-Rom program and services <u>Available From:</u> Sonic e-Learning – Alert Driving <u>Web Address:</u> http://www.alertdriving.com/
General Safe Driving Training Course	THE SMITH SYSTEM INTERACTIVE CD-ROM Inter-active CD Rom courses and numerous safe driving videos <u>Available From:</u> The Smith System (not specifically oriented to 15-passenger vans) <u>Web Address:</u> http://www.smith-system.com

Washington State Agency Driving Safety Training Resources

Several state agencies provide safe driving-related services that other agencies and colleges may find helpful in their 15-passenger van education and training. These services are *free* or at minimal cost.

RESOURCE TYPE	STATE AGENCY SERVICES RESOURCE INFORMATION
*15-Passenger Van Training Course Borrow Free	DEPARTMENT OF GENERAL ADMINISTRATION Coaching the Van Driver II (Video and instructor manual). Borrowing limit is 3 weeks. To borrow, contact: State Services Division – State Motor Pool Web address: http://www.ga.wa.gov/mp/services.html Phone: 360-438-8235 <u>Note:</u> The corresponding student workbook can be purchased from FLI Learning Systems by contacting: http://www.flilearning.com/products/van.htm .

**Washington State Agency
Driving Safety Training Resources (continued)**

RESOURCE TYPE	STATE AGENCY SERVICES RESOURCE INFORMATION
<p>Defensive Driver Training Classroom Course</p> <p>Minimal Charge</p>	<p>DEPARTMENT OF PERSONNEL</p> <p>This is a defensive driver-training course for any state driver—it is <i>not</i> specifically oriented to 15-passenger van driving. For more information about DOP training courses, visit the web site provided below.</p> <p>Web Address: http://hr.dop.wa.gov/edtp/pages/flcosts.htm</p>
<p>Safety and Health Videos – Extensive List of Safe Driving Topics</p> <p>Borrow Free</p>	<p>DEPARTMENT OF LABOR AND INDUSTRIES</p> <p>The Department of Labor and Industries maintains an extensive safety video library where private sector and state government employers can borrow videos without charge (except for return mailing postage).</p> <p>Contact Labor and Industries for questions about safety video topics/titles or borrowing instructions for their videos:</p> <p>Web Address: http://www.lni.wa.gov/wisha/videocat/index.htm Phone: 360-902-5444/Toll free: 1-800-574-9881 FAX: 360-902-5675 Video Librarian: 360-902-5453</p> <p><u>Note:</u> The Risk Management Division maintains a listing of Labor and Industries videos related specifically to safe driving. The list can be viewed at the following web address: http://www.ofm.wa.gov/rmd/loss/drivingsafety.pdf.</p>
<p>Safe Driving Videos</p> <p>Borrow Free</p>	<p>OFM – RISK MANAGEMENT DIVISION</p> <p>OFM’s Risk Management Division maintains a small library of safe driving videos, which are listed below. Borrowing limit is two weeks per use, and videos are loaned without charge (except for return mailing postage). For more information about these videos, contact the Risk Management Division at:</p> <p>Web Address: http://www.ofm.wa.gov/rmd/loss/videos.htm E-Mail Address: ofm.risk.management@ofm.wa.gov Phone: 360-902-7312</p> <p style="text-align: center;">DRIVING SAFETY VIDEO TITLES</p> <ul style="list-style-type: none"> ▪ Trucks Vans, and Other Delivery Vehicles (18 minutes) ▪ Distracted Driver (18 minutes) ▪ Safe Winter Driving (23 Minutes)